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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,665	08/09/2001	Hubert Jaeger	112740-239	3726
29177	7590	02/22/2006	EXAMINER	
BELL, BOYD & LLOYD, LLC P. O. BOX 1135 CHICAGO, IL 60690-1135			WONG, TINA MEI SENG	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 02/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

E/C

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/925,665	JAEGER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tina M. Wong	2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/9/01</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Priority*

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,456,751 to Bowers et al.

In regards to claims 1 and 2, Bowers et al discloses a controllable switching module (Figure 3) comprising at least N optical inputs (28), at least N optical outputs (38), a switching matrix have a plurality of switching points (34, 38) and a control unit (24, 26) switching through a respective optical signal from one input via a switching point to one output. But Bowers fails to specifically disclose an order of arrangement of the inputs to be determined by an attenuation produced when the optical signals are switched from the inputs via the switching points to the outputs increasing or decreasing from the first to the Nth optical input. However, an apparatus claim must be structurally distinguishable from the prior art. While the features of an apparatus may be recited either structurally or functionally, the claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. (*In re Schreiber*, 128 F.3d 1473, 1477-78, 44USPQ2d 1429, 1431-32, Fed. Cir 1997) A claim containing a "recitation

with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus if the prior art apparatus teaches all of the structural limitations of the claim. (*Ex parte Masham*, 2 USPQ2d 1647, Bd. Pat. App. & Inter. 1987) ; See MPEP 2114 [R-1]

Furthermore, the functional recitation of “an order or arrangement...” has not been given patentable weight. In order to be given patentable weight, a functional recitation must be expressed as a “means” for performing the specified function, as set from in 35 USC 112, 6<sup>th</sup> paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. (*In re Fuller*, 1929 CD 172; 388 OG 279)

Therefore, the prior art meets the structural limitations of the requirements of the rejection set forth.

In regards to claims 3-6, Bowers et al discloses at least one matching unit (48). Although it is not explicitly stated by Bowers et al, the matching of the inputs and outputs of the matrix would have been obvious at the time the invention was made to a person having ordinary skill in the art to have the attenuations in order since it is known that when the inputs are switched from the optical inputs to the switching points, attenuation between the connections would be inherent.

In regards to claims 7-10, Bowers et al discloses the orders of the arrangement of the optical inputs and of the optical outputs are processed in a control unit when the optical signals are switched through.

In regards to claim 11, Bowers et al discloses a controllable switching module comprising at least N optical inputs (28), at least N optical outputs (38), a switching matrix having a plurality of switching points (34, 38) and a control unit (24, 26) switching through a respective optical

Art Unit: 2874

signal from one input via a switching point to one output. But Bowers fails to specifically disclose an order of arrangement of the inputs to be determined by an attenuation produced when the optical signals are switched from the inputs via the switching points to the outputs increasing or decreasing from the first to the Nth optical input. However, an apparatus claim must be structurally distinguishable from the prior art. While the features of an apparatus may be recited either structurally or functionally, the claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. (*In re Schreiber*, 128 F.3d 1473, 1477-78, 44USPQ2d 1429, 1431-32, Fed. Cir 1997) A claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus if the prior art apparatus teaches all of the structural limitations of the claim. (*Ex parte Masham*, 2 USPQ2d 1647, Bd. Pat. App. & Inter. 1987) ; See MPEP 2114 [R-1]

Furthermore, the functional recitation of “an order or arrangement...” has not been given patentable weight. In order to be given patentable weight, a functional recitation must be expressed as a “means” for performing the specified function, as set from in 35 USC 112, 6<sup>th</sup> paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. (*In re Fuller*, 1929 CD 172; 388 OG 279)

Bowers et al further fails to specifically disclose connecting fiber lines between each input, output and switching stage. However, the use of optical fibers and other connecting lines are widely applied and used in the art. Without the connecting optical fibers, the information or signal would not have a venue to switch or transmit to another components to be read/analyzed. Therefore, although not explicitly stated, it would have been obvious at the time the invention

was made to a person having ordinary skill in the art to have included connecting fiber lines between each input, output and switching stage.

***Prior Art***

The documents submitted by applicant in the Information Disclosure Statement have been considered and made of record. Note attached copy of form PTO-1449.

***Inventorship***

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tina M. Wong whose telephone number is (571) 272-2352. The examiner can normally be reached on Monday-Friday 8:30-5:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2874

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



TMW



SUNG PAK  
PRIMARY EXAMINER